

Phospho-EGFR (Thr678) Rabbit mAb
Catalog # AP74963**Specification****Phospho-EGFR (Thr678) Rabbit mAb - Product Information**

Application	WB
Primary Accession	P00533
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	134277

Phospho-EGFR (Thr678) Rabbit mAb - Additional Information

Gene ID 1956

Other Names
EGFR**Dilution**
WB~~1/500-1/1000**Format**
Liquid**Phospho-EGFR (Thr678) Rabbit mAb - Protein Information****Name** EGFR ([HGNC:3236](#))**Synonyms** ERBB, ERBB1, HER1**Function**

Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed: [10805725](http://www.uniprot.org/citations/10805725), PubMed: [27153536](http://www.uniprot.org/citations/27153536), PubMed: [2790960](http://www.uniprot.org/citations/2790960), PubMed: [35538033](http://www.uniprot.org/citations/35538033)). Known ligands include EGF, TGFA/TGF- alpha, AREG, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF (PubMed: [12297049](http://www.uniprot.org/citations/12297049), PubMed: [15611079](http://www.uniprot.org/citations/15611079), PubMed: [17909029](http://www.uniprot.org/citations/17909029), PubMed: [20837704](http://www.uniprot.org/citations/20837704), PubMed: [27153536](http://www.uniprot.org/citations/27153536), PubMed: [2790960](http://www.uniprot.org/citations/2790960), PubMed: [7679104](http://www.uniprot.org/citations/7679104), PubMed: [8144591](http://www.uniprot.org/citations/8144591), PubMed: [9419975](http://www.uniprot.org/citations/9419975))

target="_blank">9419975). Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules (PubMed:27153536). May also activate the NF-kappa-B signaling cascade (PubMed:11116146). Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling (PubMed:11602604). Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin (PubMed:11483589). Positively regulates cell migration via interaction with CCDC88A/GIV which retains EGFR at the cell membrane following ligand stimulation, promoting EGFR signaling which triggers cell migration (PubMed:20462955). Plays a role in enhancing learning and memory performance (By similarity). Plays a role in mammalian pain signaling (long-lasting hypersensitivity) (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein Golgi apparatus membrane; Single-pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Endosome. Endosome membrane. Nucleus. Note=In response to EGF, translocated from the cell membrane to the nucleus via Golgi and ER (PubMed:17909029, PubMed:20674546). Endocytosed upon activation by ligand (PubMed:17182860, PubMed:17909029, PubMed:27153536, PubMed:2790960). Colocalized with GPER1 in the nucleus of estrogen agonist-induced cancer-associated fibroblasts (CAF) (PubMed:20551055)

Tissue Location

Ubiquitously expressed. Isoform 2 is also expressed in ovarian cancers.

Phospho-EGFR (Thr678) Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-EGFR (Thr678) Rabbit mAb - Images



